

 $^{3}\text{H-}$ Thymidine incorp.(cpm x $^{10^{3}}$)

APPLICANT(S): Grotendorst and Neff
TITLE: CONNECTIVE TISSUE GROWTH FACTOR
FRAGMENTS AND METHODS AND USES THEREOF
Application No.: Unassigned
Docket No.: FIBRO1130-3

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cccggccgacagccccgagacgacagcccggcgcgtcccggtccccacctccgaccaccgcca accATGACCGCCGCCAGTATGGGCCCCGTCCGCGTCGCCTTCGTGGTCCTCCTC TAASMGPVRVAFVVLL GCCCTCTGCAGCCGGCCGGCCGTCGGCCAGAACTGCAGCGGGCCGTGCCGGTGCCCGGAC P A V G Q NCSGPCRC P D С S R -> exon 2 GAGCCGCCGCCCCCCCGCCGCCGCCGCCTGAGCCTCGTGCTGGACGGCTGCGGCTGCTGC EPAPRCPAGVSLVL D G C CGCGTCTGCGCCAAGCAGCTGGGCGAGCTGTGCACCGAGCGCGACCCCTGCGACCCGCAC LCT RVCAKQLGE E R D PC AAGGGCCTCTTCTGTGACTTCGGCTCCCCGGCCAACCGCAAGATCGGCGTGTGCACCGCC F C D F G S Ρ Α N R K Ι T A \ - > AAAGATGGTGCTCCCTGCATCTTCGGTGGTACGGTGTACCGCAGCGGAGAGTCCTTCCAG K D G A P C I F G G T V Y RSGE S F O exon 3 AGCAGCTGCAAGTACCAGTGCACGTGCCTGGACGGGCGGTGGGCTGCATGCCCCTGTGC S S C K Y O C T C L D G A V G C M Р AGCATGGACGTTCGTCTGCCCAGCCCTGACTGCCCCTTCCCGAGGAGGGTCAAGCTGCCC PSPD C P Ρ R R V GGGAAATGCTGCGAGGAGTGGGTGTGTGACGAGCCCAAGGACCAAACCGTGGTTGGGCCT GKCCE EWVC DEPKDO \mathbf{T} G P GCCCTCGCGGCTTACCGACTGGAAGACACGTTTGGCCCAGACCCAACTATGATTAGAGCC E D T F G P D P T Α Y R L М Ι -> exon 4 AACTGCCTGGTCCAGACCACAGAGTGGAGCGCCTGTTCCAAGACCTGTGGGATGGGCATC NCLVQ Т Т Ε W S A C S KTCG M TCCACCCGGGTTACCAATGACAACGCCTCCTGCAGGCTAGAGAAGCAGAGCCGCCTGTGC V T ASCRL R N D N E K O

FIG. 2-1

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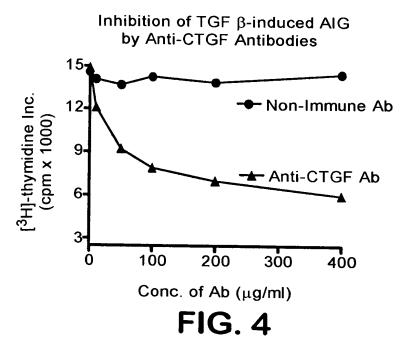
ATG	GTC.	AGG	CCT	TGC	GAA	.GCT	GAC	CTG	GAA	GAG	AAC	ATT	AAG	AAG	GGC	'AAA	AAG	TGC.	ATC
M	V	R	P	С	E	Α	D	L	E	E	N	I	K	K	G	K	K	С	I
														->	е	xon	5		
CGTACTCCCAAAATCTCCAAGCCTATCAAGTTTGAGCTTTCTGGCTGCACCAGCATGAAG																			
R	Т	P	K	I	S	K	P	Ι	K	F	E	L	S	G	С	T	s	М	K
ACATACCGAGCTAAATTCTGTGGAGTATGTACCGACGGCCGATGCTGCACCCCCCACAGA																			
T	Y	R	A	K	F	С	G	V	С	T	D	G	R	С	С	T	P	Н	R
ACCACCACCTGCCGGTGGAGTTCAAGTGCCCTGACGGCGAGGTCATGAAGAAGAACATG															ATG				
Т	Т	Т	L	P	V	E	F	K	С	P	D	G	E	V	M	K	K	N	M
ATGTTCATCAAGACCTGTGCCTGCCATTACAACTGTCCCGGAGACAATGACATCTTTGAA															GAA				
M	F	I	K		С	A	С	Н	Y	N	С	P	G	D	N	D	I	F	E
TCG(CTG'	TAC'	TAC	AGG	AAG	ATG	TAC	GGA	GAC	ATG	GCA	TGA	agc	caq	aga	gtga	aga	gac	att
S	L	Y	Y	R	K	M	Y	G	D	M	A	*		5	5	5-5		_,	

FIG. 2-2

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GCC	CTC	GCG	GCT.	rac(CGA	CTG	GAA(GAC	ACG'	rtt(GGC	CCA	GAC	CCA	ACT	ATG	ATT	AGA	GCC
A	L	A	A ->	-		L 4	E	D	T	F	G	P	D	P	Т	M	I	R	Α
AACTGCCTGGTCCAGACCACAGAGTGGAGCGCCTGTTCCAAGACCTGTGGGATGGGCATC																			
			V		T	Т	Е	W	s	A		s	K	Т	С	G	M	G	I
PCCACCGGGTTACCAATGACAACGCCTCCTGCAGGCTAGAGAAGCAGAGCCGCCTGTGC																			
s	T	R	V	T	N	D	N	A	S	С	R	L	E	K	Q	S	R	L	С
ATGGTCAGGCCTTGCGAAGCTGACCTGGAAGAGAACATTAAGAAGGGCAAAAAGTGCATC																			
M	V	R	P	С	E	Α	D	L	E	E	N	I	K	K	G	K	K	С	I
														->	e	xon	5		
CGT	ACT	CCC.	AAA	ATC'	rcc <i>i</i>	\AG(CCT	ATC	AAG'	rtt	GAG	CTT'	rct(GGC'	TGC:	ACC	AGC	ATG	AAG
R			K	I	S	K	P		K	F	E	L	s	G	С	Т	S	M	K
			GCT						rgt/	ACC	GAC	GGC	CGA'	rgc'	rgc.	ACC	CCC		
T .	Y	R	A	K	F	С	G	V	С	Т	D	G	R	С	С	Т	P	Н	R
ACCACCACCTGCCGGTGGAGTTCAAGTGCCCTGACGGCGAGGTCATGAAGAAGAACATG															ATG				
T	T	Т	L	P	V	E	F	K	С	P	D	G	E	V	M	K	K	N	M
ATG'	TTC	ATC.	AAG	ACC'	rgro	acci	rgco	CAT	rac:	AAC'	ፐርጥ	- 	GAG	GA C	ልልጥ	GAC	מייטיד ב	ייייי	AAF
М		T	K	т	C	Α		Н				P	G	ח	N	ח	T	F	E
••	•	_		•	Č		•	**	•		_	•	0	ב	14	ב	_	-	
rcg	CTG:	rac'	TAC	AGG	\AGI	ATGT	rac	GGA	GAC	ATG	GCA:	rga:	agc	caga	aga	gtga	aga	gac	att
S	L	Y	Y	R	K	М	Y	G	D	M	Α	*							



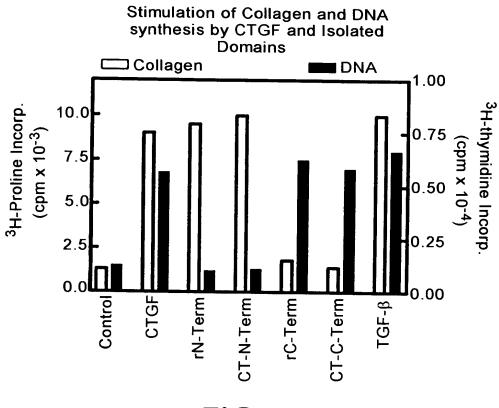


FIG. 5

Effect of EGF on CTGF Mitogenic Activity

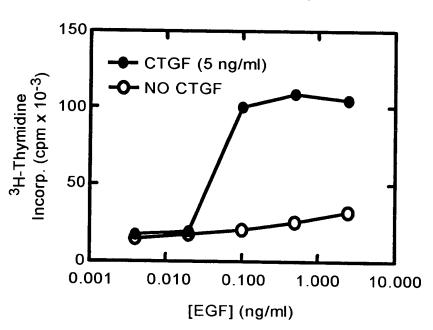
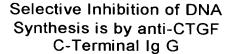


FIG. 6



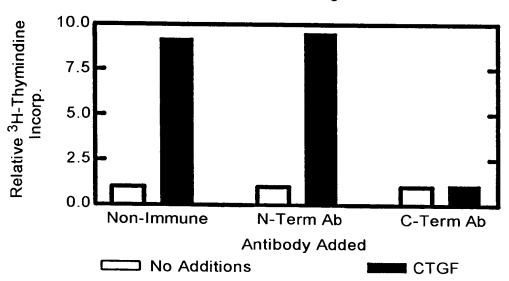


FIG. 7